FILE NOTATIONS

Entered In N I D File	✓	Checked by Chief	✓
Entered On S R Sheet	✓	Copy N I D to Field Office	✓
Location Map Pinned	✓	Approval Letter	✓
Card Indexed	✓	Disapproval Letter	
I W R for State or Fee Land			

COMPLETION DATA:

Date Well Completed	2-4-60	Location Inspected	
OW	WW	TA	Bond released State of Fee Land
GW	OS	PA X	

LOGS FILED

Driller's Log 3-25-60

Electric Logs (No.) 3

E | I | E-I ✓ | GR | GR-N | Micro

Lat | Mi-L | Sonic | Others Contact Caliper Log, Radioactivity Log

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency Navajo

Allottee Tribal

Lease No. 14-20-603-235

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	X	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

December 22, 19 59

North Boundary
Well No. Butte 2 is located 1980 ft. from {N / S} line and 1980 ft. from {E / W} line of sec. 16

SE NW 16 (¼ Sec. and Sec. No.) | 42 S (Twp.) | 22 E (Range) | S.L.B.M. (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation ~~of the derrick floor above sea level~~ is 4934 ft. (approx. ground)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

1. Drill 12-1/4" hole to 600'±.
2. Run and cement 8-5/8", 28#, J-55 casing at 600'± with 350 sacks cement, last 200 sacks treated with calcium chloride (circulated).
3. Drill 7-7/8" hole to 5800' (objective Paradox and Lower Hermosa).
4. If commercial production is obtained a supplementary completion notice will be issued.

Surface Formation is Jurassic - Glen Canyon Group

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address Post Office Box 158

Farmington, New Mexico

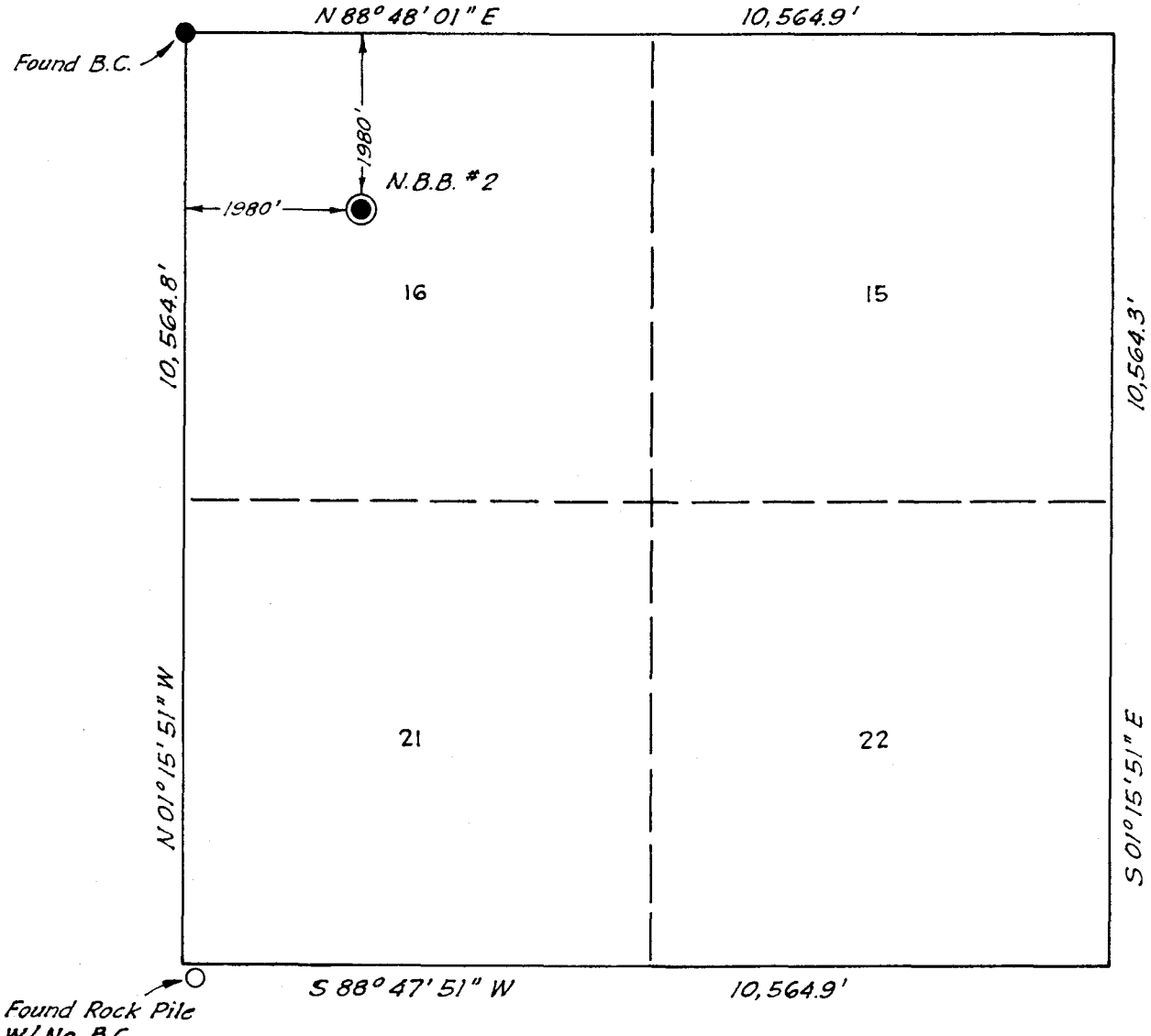
Original signed by
B. W. SHEPARD

By B. W. Shepard

Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

TRACT NO. 44



Elev.'s.
Un.G. 4934
G.G. _____
D.F. _____
K.B. _____

This is to certify that the above plat was plotted from field notes of a survey made under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Blaine H. Fitzgerald
Registered Land Surveyor
Certificate No. L.S. #2334

REGISTERED LAND SURVEYOR BLAINE H. FITZGERALD NO. 2334

DRAWN BY R.J.C.	SHELL OIL COMPANY	SCALE 1" = 2000'
CHECKED BY		Z-
DATE Dec. 21, 1959		

LOCATION OF NORTH BOUNDARY BUTTE - 2
San Juan County, Utah, Tract 44, Sec. 16, T. 42 S., R. 22 E.

December 23, 1959

Shell Oil Company
P. O. Box 158
Farmington, New Mexico

Attention: B. W. Shepard,
Exploitation Engineer

Gentlemen:

This is to acknowledge receipt of your notice of intention to drill Well No. North Boundary Butte 2, which is to be located 1980 feet from the north line and 1980 feet from the west line of Section 16, Township 42 South, Range 22 East, SLBM, San Juan County, Utah.

Please be advised that insofar as this office is concerned approval to drill said well is hereby granted.

This approval terminates within 90 days if the above mentioned well is not spudded in within said period.

Yours very truly,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
EXECUTIVE SECRETARY

CBF:co

cc: P. T. McGrath, Dist. Eng.
U. S. Geological Survey
Farmington, New Mexico

Budget Bureau No. 42-R714.4.
Approval expires 12-31-60.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALLOTTEE Tribal
TRIBE Navajo
LEASE No. 14-20-603-235

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* San Juan *Field* Wildcat - North Boundary Butte

The following is a correct report of operations and production (including drilling and producing wells) for the month of January, 1960,

Agent's address Post Office Box 158 *Company* Shell Oil Company

Farmington, New Mexico *Signed* Original signed by B. W. SHEPARD

Phone Davis 5 - 8811 *Agent's title* Exploitation Engineer

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
SE NW 16	42S	22E	2	-	--	--	--	--	--	Spudded 1-2-60 coring at 5815' as of 1-31-60

NOTE.—There were No runs or sales of oil; No M. cu. ft. of gas sold; NO runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

Form 9-329A
(December 1948)

16—26231-6 U. S. GOVERNMENT PRINTING OFFICE

Form 9-331 b
(April 1952)

	X		
		16	

(SUBMIT IN TRIPLICATE)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee Tribal

Lease No. 14-20-603-[illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 3, 1960

North Boundary Butte

Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 16

SE NW 16 (¼ Sec. and Sec. No.) 42 S (Twp.) 22 E (Range) S.L.B.&M. (Meridian)

Mideat (Field) San Juan (County or Subdivision) Utah (State or Territory)

The elevation of the Kelly Bushing above sea level is 4932 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Status: Total Depth 5925'
Casing: 8-5/8" @ 1091'
Hole Size: 7-7/8" from 1091' to total depth

Proposed Work:

1. Fill open and drill pipe plug as follows:
   a. 30 sacks cement 5020-5120
   b. 60 sacks cement 4000-4300
   c. 60 sacks cement 1850-2000
   d. 50 sacks cement 991-1191
2. Pool for top plug, recement if not above 991'.
3. Install marker with 10 sacks cement plug at surface.

NOTE: Verbal approval to abandon was given by R. J. Shoeger, U.S.G.S., to J. D. McIlhaney.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address P. O. Box 158

Farmington, N.M.

Original signed by
R. S. Mac ALISTER, JR.

By R. S. MacAlister, Jr.

Title Division Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331 b
(April 1952)

	X		16

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

Indian Agency Navajo

Allottee Tribal

Lease No. 14-20-603-263

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 5, 1960

North Boundary Butte

Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 16

SE NW 16 (¼ Sec. and Sec. No.) 42 S (Twp.) 22 E (Range) S.L.B.M. (Meridian)

Aldert (Field) San Juan (County or Subdivision) Utah (State or Territory)

The elevation of the ~~derrick floor~~ Kelly Bushing above sea level is 4902 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

DST #1 5580-5648 (Straddle) Initial shut in 30 minutes, open 2 hrs., final shut in 2 hrs., weak to moderate blow throughout test. Recovered 1707' (16.5 bbls.) salt water. ISIP 1990, IFP 210, FFP 908, FSIP 1900, HP 2900.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address P. O. Box 156

Farmington, N.M.

Original signed by
R. S. Mac ALISTER, JR.

By R. S. MacAlister, Jr.

Title Division Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Form 9-331 b
(April 1952)

Budget Bureau No. 42-R359.4.
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Indian Agency [redacted]

Allottee Tribal

Lease No. 14-20-603-235

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	X
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 16, 1960

North Boundary Butte
Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 16

SE NW 16 (¼ Sec. and Sec. No.) | 42S (Twp.) | 22E (Range) | SLBM (Meridian)

Wildcat (Field) | San Juan (County or Subdivision) | Utah (State or Territory)

The elevation of the Kelly Bushing above sea level is 4902 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Abandonment Work

1. With open end drill pipe plugged as follows:
   a. 30 sacks cement 5020-5120
   b. 60 sacks cement 4000-4200
   c. 60 sacks cement 1850-2050
   d. 50 sacks cement 980-1191
2. Located top plug at 980'.
3. Installed marker with 10 sack cement plug at surface.
   Abandoned 2-4-60.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Shell Oil Company

Address Post Office Box 158

Farmington, New Mexico

Original signed by
B. W. SHEPARD

By B. W. Shepard

Title Exploitation Engineer

U. S. GOVERNMENT PRINTING OFFICE 16—8437b-8

Budget Bureau No. 42-R714.4.
Approval expires 12-31-60.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ALLOTTEE Tribal
TRIBE Navajo
LEASE NO. 14-20-603-235

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah *County* San Juan *Field* Wildcat - North Boundary Butte

The following is a correct report of operations and production (including drilling and producing wells) for the month of February, *19*60,

Agent's address Post Office Box 158
Farmington, New Mexico

Company Shell Oil Company

Signed Original signed by B. W. SHEPARD

Phone DAvis 5-3811

Agent's title Dist. Exploitation Engineer

Sec. and ¼ of ¼	Twp.	Range	Well No.	Date Produced	Barrels of Oil	Gravity	Cu. Ft. of Gas (In thousands)	Gallons of Gasoline Recovered	Barrels of Water (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
SE NW 16	42S	22E	2	-	--	-	--	--	--	Total Depth 5925' Abandoned 2-4-60

NOTE.—There were No runs or sales of oil; No M. cu. ft. of gas sold; No runs or sales of gasoline during the month. (Write "no" where applicable.)

NOTE.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

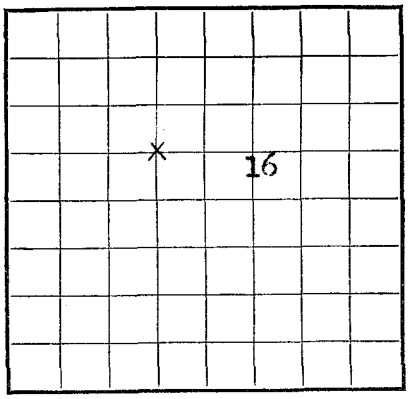
Form 9-329.A
(December 1948)

16—26231-6 U. S. GOVERNMENT PRINTING OFFICE

Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Tribal Lands
SERIAL NUMBER 14-20-603-235
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Shell Oil Company Address P. O. Box 158 Farmington, New Mexico

Lessor or Tract North Boundary Butte Field Wildcat State Utah

Well No. 2 Sec. 16 T. 42S R. 22E Meridian SLM County San Juan

Location 1980 ft. {N. / S.} of N Line and 1980 ft. {E. / W.} of W Line of Sec. 16 Elevation 4920 KB
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed Original signed by B. W. SHEPARD

Date March 23, 1960 Title ~~Division~~ Exploitation Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling January 2, 1960 Finished drilling February 1, 1960

OIL OR GAS SANDS OR ZONES

NONE (*Denote gas by G*)

No. 1, from ____ to ____ No. 4, from ____ to ____

No. 2, from ____ to ____ No. 5, from ____ to ____

No. 3, from ____ to ____ No. 6, from ____ to ____

IMPORTANT WATER SANDS

No. 1, from ____ to ____ No. 3, from ____ to ____

No. 2, from ____ to ____ No. 4, from ____ to ____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
8 5/8	28	8	Nat'l	1075	Baker	-	-	-	Surface

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8 5/8	1086	600	Displacement	-	-

PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____

Adapters—Material ____ Size ____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

FOLD | MARK

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 5925 feet, and from - feet to - feet

Cable tools were used from - feet to - feet, and from - feet to - feet

Plugged and Abandoned February 4, 1960

DATES

Put to producing ----------, 19----

The production for the first 24 hours was ---------- barrels of fluid of which ----% was oil; ----% emulsion; ----% water; and ----% sediment.

Gravity, °Bé. ----------

If gas well, cu. ft. per 24 hours ----------

Gallons gasoline per 1,000 cu. ft. of gas ----------

Rock pressure, lbs. per sq. in. ----------

EMPLOYEES

----------, Driller

Brinkerhoff Drilling Co., Driller

----------, Driller

----------, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
1648	1741	93	Shinarump
1741	1930	189	Moenkopi
1930	4068	2138	Cutler
4068	5066	998	Hermosa
5066	5666	600	Paradox
5666	5906	240	Lower Hermosa
5906	-		Molas

[OVER]

16—43094-4

DITCH SAMPLES

Examined by Shepard 4600 to 4895
and Swarbrick ___ to ___

Well North Boundary Butte 2
Field or Area North Boundary Butte

SAMPLES not LAGGED

FROM	TO	%	SHOWS UNDERLINED
4600	4615	100	Limestone, medium brown gray, I-III VF-FA, minor chert
4615	4630	100	Limestone, medium light gray to shite, common clear to light brown chert
4630	4640	80	Limestone, as above
		20	Shale, medium to dark gray, brittle, calcareous
4640	4645	60	Limestone, as above
		40	Shale, dark olive gray, calcareous
4645	4650	40	Limestone, as above
		60	Shale, as above
4650	4660	60	Limestone, medium to dark brown gray, I-III VF-FA
		40	Shale, medium brown to light gray, brittle to soft
4660	4670	20	Limestone, as above
		80	Shale, as above
4670	4675	50	Limestone, as above
		50	Shale, as above
4675	4685	20	Limestone, as above
		80	Shale, as above
4685	4695	100	Limestone brown - light gray, I-III VF-FA, scattered sand and clear chert
4695	4705	80	Limestone, as above
		20	Shale, as above light gray
4705	4715	100	Limestone, as above medium brown chert
4715	4725	60	Limestone, as above
		40	Shale, as above dark gray to black
4725	4735	90	Limestone, as above brown - gray III VF-FA
		10	Shale, as above
4735	4750	100	Limestone, as above I-III VF-FA orange chert
4750	4755	80	Limestone, as above
		20	Shale, as above, dark gray to black
4755	4760	60	Limestone dark olive gray I-III VF-FA, sand grains
		40	Shale dark gray - black
4760	4765	40	Limestone, as above
		60	Shale, as above
4765	4775	50	Limestone, as above
		50	Shale, as above
4775	4785	20	Limestone, as above
		80	Shale, as above
4785	4800	40	Limestone, as above
		60	Shale, as above
4800	4805	80	Limestone white, III, brown chert
		20	Shale, as above
4805	4830	100	Limestone, as above
4830	4840	70	Limestone white - light gray III FA, abundant chert
		30	Shale, as above dark gray
4840	4855	80	Limestone, as above
		20	Shale, as above
4855	4860	100	Limestone, as above
4860	4870	80	Limestone, as above
		20	Shale, as above dark gray
4870	4875	20	Limestone, as above
		80	Shale, as above
4875	4895	80	Limestone, as above
		20	Shale, as above

PD 4-B 8-50

WEEK ENDING January 23, 1960

CORE FROM 5095 TO 5120.5

CORES EXAMINED BY J. D. McLehaney, Jr.

SHELL OIL COMPANY

CORE RECORD

AREA OR FIELD Wildcat

COMPANY Shell

LEASE AND WELL NO. N. Boundary Butte 2

NO.	FROM	TO	RECOVERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL—GAS CORE OR DITCH
1	5095	5131	24.5'				
	5095	5097		Limestone, light brown-gray IVF-FA, scattered brachs.			
	5097	5098		Limestone, as above, abundant fusilinids, brachs, bryozoa, crinoids			
	5098	5101		Limestone, as above, rare fusilinids, brachs, bryozoa, crinoids			
	5101	5103		Limestone, as above, IVFA, spotty fluorescence along fractures, no visible staining, no porosity			
	5103	5104		Limestone, as above, fluorescence along fractures, visible oil stains along fractures, no visible porosity, core badly fractured, strong sweet gas odor, bleeding small amounts of oil.			Oil on fractures
	5104	5105		Limestone, as above, scattered brachs with thin interbedded shale, black, silty, calcareous.			
	5105	5106		Limestone, as above, dark brown-gray, argillaceous, scattered brachs.			
	5106	5109		Shale, black silty, calcareous, scattered brachs and crinoids			
	5109	5110		Shale, as above, very calcareous			
	5110	5111		Limestone, medium brown-gray, IVFA, slightly argillaceous, scattered fusilinids, brachs and crinoids			
	5111	5112		Limestone, as above, scattered oolites, spotty fluorescence along fractures no visible staining, no porosity			
	5112	5113		Limestone, as above, IVFA-B, estimated 3% porosity, oolitic, fossiliferous, spotty staining, spotty fluorescence, fair sweet gas odor			Spotty staining
	5113	5114		Limestone, as above, IVFA, scattered oolites, rare fusilinids.			
	5114	5115		Limestone, as above, with thin interbedded shale, black, silty, calcareous.			
	5115	5118		Limestone, as above, IVF-FA			
	5118	5119		Limestone, as above, scattered brachs			
	5119	5120.5		Limestone, as above,			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).

NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

PD 4A 2-60 PRINTED IN U. S. A. 3-58
Preprint *M 1718-P 5-59

SHELL OIL COMPANY

DRILLING REPORT
FOR PERIOD ENDING
2-2-60

North Boundary Butte
WELL NO. 2

Wildcat
(FIELD)

San Juan, Utah
(COUNTY)

16
(SECTION OR LEASE)
T. 42 S., R. 22 E.
(TOWNSHIP OR RANCHO)

DAY	DEPTHS FROM	DEPTHS TO	REMARKS
			Location: 1980' S and 1980' E of NW corner Sec. 16, T. 42 S., R. 22 E., SLBM, San Juan County Utah.
			Elevations: DF 4918.7, GR 4909.5', KB 4920.2'.
1-2 To 1-4	0	1160	Spudded 5:00 A.M. 1-2-60. Ran and cemented (1075') 8-5/8", 28#, J-55 casing at 1086' with 600 scaks cement, last 100 sacks treated with 2% calcium chloride. Good returns to surface. Flanged up and waited on cement. Pressure tested casing and BOP with 700 psi, OK. Waited 6 hrs. on new kelly swivel.
1-5 To 1-19	1160	5095	Drilled 4935'
1-20 To 1-22	5095	5160	Cored 65'. Core #1 5095-5131 Recovered 24-1/2'. Core #2 5131-5160 Recovered 29'.
1-23 To 1-25	5160	5547	Drilled 387'.
1-26 To 1-27	5547	5655	Drilled 54'. Cored 54'. Core #3 5570-5624 Recovered 54'.
1-28	5655	5767	Drilled 112'.
1-29	5767	5786	Drilled 3'. Cored 16'. Core #4 5770-5786 Recovered 15'.
1-30 To 1-31	5786	5831	Cored 45'. Core #5 5786-5809 Recovered 19', Core #6 5809-5831 Recovered 17'.
2-1 To 2-2	5831	5925 TD	Drilled 94'. Attempted to run Induction Electrical Survey, stopped at 1400'. Cleaned out bridge. Ran Induction Electrical Survey, Contact Caliper and Gamma Ray-Neutron Logs.

CONDITION AT BEGINNING OF PERIOD

HOLE SIZE	HOLE FROM	HOLE TO	CASING SIZE	DEPTH SET

DRILL PIPE SIZES

G. E. Dawsongrove
SIGNED

PD 4A 2-50 PRINTED IN U. S. A. 3-58
Preprint #M 1718-P 5-59

SHELL OIL COMPANY

North Boundary Butte
WELL NO. 2

Wildcat
(FIELD)

DRILLING REPORT
FOR PERIOD ENDING
2-4-60

16
(SECTION OR LEASE)

San Juan, Utah
(COUNTY)

T. 42 S., R. 22 E.
(TOWNSHIP OR RANCHO)

DAY	DEPTHS FROM	DEPTHS TO	REMARKS
2-3	5925 TD		DST#1 5550-5648 (Straddle). Paradox, TP Zone. Halliburton Testers used four 6-3/4" ESA packers at 5546, 5550 and 5648, 5652. No air cushion. Four pressure recorders, Kuster BT (out) at 5633', Kuster BT out at 5638', Kuster BT (out) at 5643 and PRD (paper chart) at 5674', 3/4" subsurface bean and 1" surface bean, perforations 5550-67 and 5638-43. Initial shut-in 30 minutes, tool open 2 hrs., Final shut-in 2 hrs., Weak blow increasing to steady good blow for duration of test; Recovered: 1707' (16.5 bbls.) total fluid including 180' (2 bbls.) watery mud and 1527' (14.5 bbls.) slightly muddy, slightly gassy salt water. Minimum salinity 3400 ppm NaCl(r). Maximum salinity 65,000 ppm NaCl(r). ISIP 1988, IFP 217, FFP 912, FSIP 1907, HP 2885/2835.
2-4			Plugged as follows: 30 sacks cement 5020-5120 60 sacks cement 4000-4200 60 sacks cement 1850-2050 75 sacks cement 980-1191 Located top of top plug 980' Released Rig 12:00 midnight 2-4-60, abandoned. Mud Summary wt. 9.1-9.6 #/gal. vis. 32-50 sec. WL 5-18 cc FC 2/32" PH 7.3-8 Contractor: Brinkerhoff Drilling Co. Co. Pusher: C. L. Christiansen

CONDITION AT BEGINNING OF PERIOD

HOLE SIZE	HOLE FROM	HOLE TO	CASING SIZE	DEPTH SET
12-1/4"	0	1160	8-5/8"	1086'
7-7/8"	1160	5925		

DRILL PIPE SIZES 4-1/2"

G. E. Dawsongrove
SIGNED

DITCH SAMPLES

Examined by Swarbrick Shepard &/ McLehaney 4895 to 5010; McLehaney 5010 to 5080; McLehaney & Swarbrick 5080 to 5215

Well North Boundary Butte 2

Field or Area North Boundary Butte

SAMPLES/LAGGED not

FROM	TO	%	SHOWS UNDERLINED
4895	4900	40	Limestone, as above
		60	Shale, as above
4900	4905	90	Limestone, white - brown gray, I-III VF-FA, chert
		10	Shale, as above
4905	4910	80	Limestone, white - brown gray I-III VF-FA, chert
		20	Shale, dark gray
4910	4920	100	Limestone, as above
4920	4925	80	Limestone, as above
		20	Shale, dark gray
4925	4930	40	Limestone, as above
		60	Shale, as above
4930	4940	70	Limestone, as above
		30	Shale, as above
4940	4950	40	Limestone, as above
		60	Shale, as above
4950	4965	50	Limestone, as above, possible trace fluorescence and cut fluorescence, very weak
		25	Shale, as above
		25	Chert, light brown, opaque
4965	4990	70	Limestone, as above, possible trace fluorescence and cut fluorescence, very weak
		10	Shale, as above
		20	Chert, as above
4990	4995	70	Limestone, white, III A, possible trace fluorescence and cut fluorescence, very weak
		20	Shale, as above
		10	Chert, as above
4995	5010	100	Limestone, white, III A
5010	5025	60	Limestone, as above
		40	Shale, dark gray, partly silty
5025	5040	100	Limestone, as above, white - light gray
5040	5075	100	Limestone, as above, fossils
5075	5080	90	Limestone, as above
		10	Dolomite, gray - brown, III VFA-B
5080	5085	60	Limestone, white - light gray, III A
		40	Dolomite, gray - brown, III VFA-B
5085	5090	10	Limestone, as above
		90	Dolomite, as above dark gray - dark brown
5090	5095	70	Dolomite, as above
		30	Shale, gray - black, silty, calcareous
5095	5131	-	Core No. 1
5131	5160	-	Core No. 2
5160	5165	100	Limestone, medium brown - gray, IVFA, dolomite
5165	5175	80	Limestone, as above
		20	Shale, gray, silty, calcareous w/occ. sand grains
5175	5185	100	Limestone, as above w/limestone white - gray III VF-FA, fossiliferous, slight fluorescence and very slight cut fluorescence
5185	5195	80	Limestone, as above, slight fluorescence, very slight cut fluorescence
		20	Shale, gray - black, silty, w/occ. sand grains
5195	5205	100	Limestone, medium brown - gray, IVFA, W/thin shale streaks, gray
5205	5210	100	Limestone, as above, IVF-FA, slightly dolomite
5210	5215	80	Limestone, as above
		20	Shale , medium-dark gray, silty, calcareous

DITCH SAMPLES

Examined by McLehaney & Swarbrick 5215 to 5290

Well North Boundary Butte 2
Field or Area North Boundary Butte

FROM	TO	%	SHOWS UNDERLINED	SAMPLES/LAGGED not
5215	5225	60	Shale, as above	
		40	Limestone, as above, slightly argillaceous, occasional brown chert fragments	
5225	5230	70	Shale, as above	
		30	Limestone, as above, occasional chert fragments	
5230	5240	100	Dolomite, dark brown - black IVFA	
5240	5250	100	Dolomite, as above, w/shale medium - dark gray, silty, slightly calcareous, w/dark brown, opaque chert particles.	
5250	5265	100	Dolomite, as above, w/chert as above trace fluorescence, no cut fluorescence	
5265	5270	100	Limestone, light - medium brown, III VF-FA, argillaceous, trace fluorescence,	
5270	5290	80	Limestone, as above	no cut fluorescence
		20	Shale, black, silty, slightly calcareous	

DITCH SAMPLES

Examined by McLehaney & Swarbrick 5290 to 5420 to ____

Well North Boundary Butte #2

Field or Area North Boundary Butte

Not SAMPLES/LAGGED

FROM	TO	%	SHOWS UNDERLINED
5290	5295	60	Limestone, light to medium brown, III VF-FA
		40	Shale, black, silty, slightly calcareous
5295	5305	100	Limestone, gray to brown, IVFA, trace fluorescence, trace cut fluorescence
5305	5310	-	No Sample
5310	5315	100	Limestone, as above, with anhydrite partings
5315	5320	60	Limestone, as above
		20	Shale, black, silty, calcareous
		20	Anhydrite
5320	5335	25	Limestone, as above
		25	Shale, as above
		50	Anhydrite
5335	5350	30	Dolomite, dark gray, III VF-FA, argillaceous
		10	Shale, as above
		60	Anhydrite
5350	5360	40	Dolomite, as above, 2-3% fluorescence, trace cut fluorescence (fluorescence poor)
		60	Anhydrite, as above, with shale partings
5360	5365	80	Dolomite, as above, 2-3% fluorescence, fluorescence poor, cut fluorescence
		20	Anhydrite
5365	5385	90	Dolomite, as above, medium gray to brown, III F-MA-B, 5-7% fluorescence fluorescence poor, cut fluorescence, (when sample dried, no fluorescence, no fluorescence when re-wetted)
		10	Anhydrite, as above, with trace brown chert
5385	5395	50	Dolomite, as above, III FA, trace fluorescence, no cut fluorescence
		5	Anhydrite
		45	Shale, black, silty, calcareous
5395	5400	70	Dolomite, as above, trace fluorescence, no cut fluorescence
		5	Anhydrite
		25	Shale, as above
5400	5420	90	Dolomite, as above, I-III VF-FA, argillaceous
		5	Anhydrite
		5	Shale, as above

DITCH SAMPLES

Examined by McLehaney & Swarbrick 5420 to 5440
Shepard 5420 to 5550
Shepard 5440 5550

Well North Boundary Butte #2
Field or Area North Boundary Butte
Not

FROM	TO	%	SHOWS UNDERLINED SAMPLES/LAGGED
5420	5425	30	Dolomite, medium gray to brown, I-III VF-FA, argillaceous
		40	Shale, black, silty, calcareous
		30	Limestone, medium gray III VF-FA, slightly dolomitic
5425	5440	100	Dolomite, light to dark brown, III VF-FA, with occasional shale and Anhydrite partings, trace brown chert, scattered fossils.
5440	5450	70	Dolomite, as above
		20	Shale, as above
		10	Anhydrite
5450	5465	80	Dolomite, medium to light brown gray, III VF-FA, 5% dull fluorescence and very pale slow cut fluorescence
		10	Shale, as above
		10	Anhydrite
			minor chert
5465	5480	90	Dolomite, as above, 2% fluorescence and cut fluorescence as above
		5	Shale, as above
		5	Anhydrite
			minor chert
5480	5490	100	Dolomite, medium to dark brown, III VFA
5490	5500	80	Dolomite, as above
		20	Limestone, medium to brown white, IVFA
			minor chert
5500	5515	90	Dolomite, as above
		10	Shale, dark gray
			minor chert
5515	5520	70	Dolomite, as above
		30	Limestone, brown, I-III VF-FA
5520	5525	100	Limestone, as above
5525	5530	100	Limestone, medium brown to white, I-III VF-F + B_{tr} + D_{tr} ? (one fragment white Limestone with crystals may indicate D porosity)
5530	5540	100	Dolomite, brown gray, I-III VF-FA
			trace chert
5540	5550	90	Dolomite, as above
		10	Limestone, white, III FA

DITCH SAMPLES

Examined by Shepard 5550 to 5750
Swarbrick ____ to ____

Well North Boundary Butte #2
Field or Area North Boundary Butte

Not SAMPLES/LAGGED

FROM	TO	%	SHOWS UNDERLINED
5550	5555	85	Dolomite, as above
		15	Limestone, as above
5555	5570	60	Dolomite, as above
		40	Limestone, as above
Cored 5570-5624			see core description
5624	5630	100	Dolomite, brown gray, I-III VF-FA
5630	5635		No sample
5635	5645	100	Dolomite, medium brown to brown gray, III VF-FA, cherty
5645	5655	100	Dolomite, as above with trace B and C porosity, Anhydrite filled vugs.
5655	5660	100	Dolomite, light brown gray, III VF-FA
5660	5685	100	Dolomite, brown gray, I-III VF-FA, abundant milky white chert
5685	5695	70	Dolomite, as above and chert as above
		30	Shale, medium gray
5695	5705	90	Dolomite, as above and chert as above
		10	Shale, as above
5705	5710	100	Dolomite, as above, scattered chert
5710	5720	100	Limestone, light brown gray, I-III VFA, sandy
5720	5725	100	Limestone, medium brown gray, I-III VF-FA, abundant fossils
5725	5735	70	Limestone, white, III VF-FA, sandy, scattered chert
		30	Dolomite, white to dark brown, III VF-MA, trace fluorescence and pale cut fluorescence after crushing
5735	5745	100	Limestone, white, III F-M + trace B & C porosity, abundant chert, 3-5% fluorescence and pale cut fluorescence after crushing
5745	5750	10	Limestone, as above
		90	Dolomite, white to brown gray, III FA, 3-5% fluorescence and pale cut fluorescence after crushing

DITCH SAMPLES

Examined by Shepard & Swarbrick 5750 to 5875
Dawsongrove 5750 to 5900
Dawsongrove 5875 - 5900

Well North Boundary Butte #2
Field or Area North Boundary Butte

Not SAMPLES/LAGGED

FROM	TO	%	SHOWS UNDERLINED
5750	5755	100	Dolomite, light brown gray to white, III FA, abundant chert, 5% fluorescence and pale cut fluorescence after crushing
5755	5760	90	Dolomite, as above, 3% fluorescence and cut fluorescence as above
		5	Sandstone, gray, fine to very fine
		5	Shale, medium gray
			abundant chert
5760	5770	100	Limestone, light brown gray, III FA, 3% fluorescence and cut fluorescence as above
Circulation samples at 5770			
			Limestone, as above with trace B porosity, 10% fair fluorescence and fair milky cut fluorescence (without crushing or other treatment)
Cored 5770-5786			
Core #5, 5786-5809			
Core #6, 5809-5831			
5830	5835	20	Limestone, medium brown gray, III A, oolitic
		80	Shale, green gray, soft, sandy
5835	5845	20	Limestone, medium to light brown, IVFA
		80	Shale, green gray, red, purple, soft, sandy, calcareous
5845	5850		No Sample
5850	5855	100	Limestone, medium to dark brown, IVFA, fossiliferous
5855	5870	40	Limestone, as above
		60	Limestone, medium brown, III VF + B_{tr} + C_{tr} + D? (vugs indicated by fragments with crystals)
5870	5875	10	Limestone, IIIA, oolitic
		90	Limestone, medium brown, III VF-FA, slightly dolomitic, cherty
5875	5885	90	Limestone, light to dark brown, III VF, argillaceous, bioclastic, scattered dense chert, 1-2% fluorescence, no cut fluorescence
		10	Shale, greenish gray, some purple and pink.
5885	5890	90	Limestone, as above, oolitic, 5-10% fluorescence, no cut (mineral fluorescence?)
		10	Shale, as above, cherty
5890	5900	70	Limestone, as above, III VF, bioclastic, 5-10% fluorescence as above, no cut
		30	Shale, as above, cherty

DITCH SAMPLES

Examined by Dawsongrove 5900 to 5925
Swarbrick 5900 to 5925

Well North Boundary Butte #2
Field or Area North Boundary Butte

SAMPLES Not LAGGED

FROM	TO	%	SHOWS UNDERLINED
5900	5910	70	Limestone, brown to light grey, III VF-FA, argillaceous, some bioclastic, abundant brown chert.
		10	Limestone, dark brown, oolitic, bioclastic
		20	Shale, green, red, purple, grey
5910	5915	60	Limestone, white to grey, III VF, bioclastic
		40	Shale, grey, green, maroon, purple, black, brittle, cherty.
5915	5920	70	Shale, purple, grey, greenish brown
		30	Limestone, white to grey, III VF, cherty
5920	5925	60	Limestone, white to dark grey, III VF, bioclastic, some oolite, argillaceous
		40	Shale, green, purple, grey to brownish grey, cherty

TOTAL DEPTH 5925'

PD 4-B 8-50

SHELL OIL COMPANY

CORE RECORD

WEEK ENDING January 23, 1960

CORE FROM 5131 TO 5160

CORES EXAMINED BY Swanbrick, McLehaney

AREA OR FIELD Wildcat

COMPANY Shell Oil Company

LEASE AND WELL NO. N. Boundary Butt No. 2

NO.	FROM	TO	RECOV-ERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL—GAS CORE OR DITCH
2	5131	5160	29'				
	5131	5133	2'	Limestone, medium brown-gray, IVFA, slightly argillaceous, calcite healed fracs, scattered brachs, slightly fluorescent on fractures.			Spotty Fluourescence on fractures possibly onl mineral fluorescence
	5133	5135.5	2.5'	Limestone, as above, dolomite, spotty fluorescence on fracs. Thin interbedded shale stringers, black, silty, calcareous.			
	5135.5	5138.5	3'	Limestone, as above, spotty flourescence on fracs, scattered brach fragments.			
	5138.5	5140.5	2'	Limestone, as above, dolomitic.			
	5140.5	5142.5	2'	Shale, black, silty, calcareous.			
	5142.5	5145.5	3'	Limestone, medium brown-gray, IVFA, calcite healed fracs, scattered crinoids, slight fluorescence on fracs.			
	5145.5	5150.5	5'	Limestone, as above, slightly dolomite, slightly argillaceous, scattered crinoids, brachs.			
	5150.5	5151.5	1'	Dolomite, medium brown-gray, IFVA, argillaceous.			
	5151.5	5155	3.5'	Shale, black, silty, calcareous, very brittle.			
	5155	5160	5'	Limestone, medium brown-gray IVFA, fossiliferous, calcite healed fracs.			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

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SHELL OIL COMPANY

CORE RECORD

WEEK ENDING 31 January, 1960

CORE FROM 5570' TO 5620'

CORES EXAMINED BY Shepard & Swarbrick

AREA OR FIELD North Boundary Butte

COMPANY Shell Oil Company

LEASE AND WELL NO. 2

NO.	FROM	TO	RECOV-ERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE INDICATIONS OIL—GAS / CORE OR DITCH
3	5570	5624	54'				
	5570	5572	2	Dolomite, medium to dark brown gray, I-III F-M + B_{tr}			None
	5572	5573	1	Dolomite, medium to dark brown gray, I-III VFA, thin streaks black Shale			
	5573	5576	3	Dolomite, medium to dark brown gray, III F-M + B_2			
	5576	5577	1	Dolomite, medium to dark brown gray, III F-M + B_2 + C_3 + D_{tr}, vugs partially filled with anhydrite			
	5577	5578	1	Dolomite, medium to dark brown gray, III F-M + B_4 + C_3 + D_{tr}, vugs partially filled with anhydrite			
	5578	5579	1	Dolomite, medium to dark brown gray, III F-M + B_2 + C_1			
	5579	5582	3	Dolomite, medium to dark brown gray, III F-M + B_2 + C_{tr}			
	5582	5583	1	Dolomite, medium to dark brown gray, III VF-F + B_{tr}			
	5583	5584	1	Limestone, light brown gray to white, III VF + B_{tr}, fossiliferous			
	5584	5585	1	Dolomite, medium to brown gray, III VF-F + B_{tr}			
	5585	5588	3	Limestone, medium to brown gray, I-III VF-FA, fossiliferous			
	5588	5589	1	Limestone, medium brown, I-III FA			
	5589	5592	3	Dolomite, medium brown, III F-M + B_1			
	5592	5593	1	Dolomite, medium to light brown gray, III F-M + B_2 + C_{tr}			
	5593	5594	1	Dolomite, medium to light brown gray, IVFA			
	5594	5595	1	Dolomite, light brown gray, III VF + B_{tr}, thin shale streaks			
	5595	5596	1	Dolomite, light brown gray, III VFA			
	5596	5597	1	Shale, black, calcareous, silty			
	5597	5599	2	Dolomite, medium brown, III VF-FA			
	5599	5600	1	Dolomite, medium brown, III VF + B_{tr}			
	5600	5603	3	Dolomite, medium brown, III VF-F + B_2 + C_{tr}			
	5603	5605	2	Dolomite, medium brown, III VF-F + B_3			
	5605	5606	1	Limestone, light brown gray, IIA, abundant spines			
	5606	5607	1	Dolomite, medium to light brown gray, III VF + B_2			
	5607	5609	2	Limestone, medium to light brown gray, III VF + B_3, fossiliferous			
	5609	5612	3	Limestone, medium to light brown gray, III VFA, fossiliferous			
	5612	5613	1	Dolomite, medium to light brown gray, III VFA			
	5613	5614	1	Limestone, medium to dark brown, III VFA, fossiliferous			
	5614	5615	1	Dolomite, medium to dark brown, III VFA			
	5615	5616	1	Limestone, medium to dark brown, III VFA, fossiliferous			
	5616	5619	3	Dolomite, medium to light brown gray, III VFA			
	5619	5620	1	Dolomite, dark brown, III VFA			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

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SHELL OIL COMPANY

CORE RECORD

WEEK ENDING 31 January 1960
CORE FROM 5620' TO 5822'
CORES EXAMINED BY Shepard & Swarbrick

AREA OR FIELD North Boundary Butte
COMPANY Shell Oil Company
LEASE AND WELL NO. 2

NO.	FROM	TO	RECOV-ERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE - INDICATIONS OIL-GAS CORE OR DITCH
3(con't)							
	5620	5621	1	Dolomite, medium brown gray, III F-M + B_2			
	5621	5623	2	Dolomite, medium brown gray, III VFA			
	5623	5624	1	Dolomite, medium brown gray, III VF-F + B_{tr}			
4	5770	5786	15'				top 3" see description
	5770	5775	5	Dolomite, medium to dark gray, III VF-L + B_5 + C_6 + D_6 (vugs to 1/4"), top 3" trace fluorescence and pale cut fluorescence			
	5775	5776.5	1.5	Dolomite, medium to dark gray, III F-M + B_4 + C_4, shaly in part			
	5776.5	5780	3.5	Dolomite, medium brown gray, III VFA			
	5780	5782	2	Limestone, medium brown, III A, abundant fossils			
	5782	5785	3	Dolomite, light to medium gray, III VF-FA			
5	5786	5809	19'				
	5786	5789	3	Dolomite, medium to light gray, III VF-FA			
	5789	5792	3	Sandstone, medium to light gray, very fine, well sorted, subround to subangular, very slightly calcareous			
	5792	5794	2	Dolomite, light to medium gray, III VF-FA, sandy, slightly argillaceous			
	5794	5798	4	Shale, black, silty and sandy, dolomitic, hard			
	5798	5800	2	Dolomite, dark gray, III VF-FA, argillaceous			
	5800	5804	4	Shale, medium to dark gray, silty, slightly dolomitic			
	5804	5805	1	Limestone, medium brown gray, III A, abundant fossils			
6	5809	5832	17'				
	5809	5809.5	0.5	Limestone, medium brown gray, IVF-FA, fossiliferous			None
	5809.5	5810	0.5	Limestone, oolitic, medium to light brown gray, I-III VF-FA			
	5810	5811.5	1.5	Limestone, oolitic, medium to light brown gray, I-III VF-F + C_5, bleeding salt water.			
	5811.5	5812	0.5	Limestone, medium brown gray, IVFA, thin (1/4") streak shale, black, silty, calcareous			
	5812	5813	1	Limestone, medium brown gray, III A, oolitic in part, fossiliferous			
	5813	5814	1	Limestone, medium brown gray, IVFA			
	5814	5815	1	Limestone, medium brown gray, I-III VFA, bioclastic			
	5815	5817	2	Limestone, dark brown gray, IVFA, argillaceous, fossiliferous			
	5817	5819	2	Limestone, light to dark brown gray, III A			
	5819	5821	2	Limestone, dark brown gray, III with C_{tr-3} porosity, fossiliferous, bleeding salt water			
	5821	5822	1	Limestone, light gray, III A, fossiliferous			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.

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SHELL OIL COMPANY

CORE RECORD

WEEK ENDING 31 January 1960

CORE FROM 5822' TO 5826'

CORES EXAMINED BY Shepard & Swarbrick

AREA OR FIELD North Boundary Butte

COMPANY Shell Oil Company

LEASE AND WELL NO. 2

NO.	FROM	TO	RECOV-ERED	FORMATIONAL, STRUCTURAL AND PROBABLE PRODUCTIVITY DESCRIPTION OF CORE	SYMBOL	OBSERVED DIP	CORE - INDICATIONS OIL—GAS CORE OR DITCH
6(con't)							
	5822	5823	1	Limestone, light gray, III FA, dolomitic			
	5823	5824	1	Shale, light gray, soft, mushy, (core badly broken in this interval and may represent some of last recovery)			
	5824	5825	1	Limestone, dark brown gray, I-III VFA, fossiliferous, thin interbedded shale streaks (1/8"), black, silty, calcareous			
	5825	5826	1	Limestone, oolitic, dark brown gray, I-III VFA			

SYMBOLS: C-CLAY OR SHALE (SAND 0-5%). 1-CLAY OR SHALE WITH SAND STREAKS (SAND 5-25%). 2-CLAY OR SHALE AND SAND (SAND 25-60%). 3-SAND WITH SHALE STREAKS (SAND 60-90%). S-SAND (90-100%).
NOTE: SHOW FLUID CONTENT AS IN STANDARD LEGEND.